

REMARKS

STATUS OF THE CLAIMS

Claim 6-8 and 16 are allowed, which action is acknowledged and greatly appreciated.

Claims 9 and 12-14 are rejected.

Claims 10, 11, and 15 are objected to but are indicated to be allowable if suitably rewritten to independent form.

ITEM 3: REJECTION OF CLAIMS 9 AND 12 FOR ANTICIPATION UNDER 35 U.S.C. §102(b) BY AMEMIYA ET AL. (APPLICANT'S IDS REFERENCE SUBMITTED OCTOBER 19, 2004)

The rejection is respectfully traversed. Applicants respectfully submit that the Examiner incorrectly interprets claims 9 and 12, in reading same on Amemiya et al., and as well incorrectly interprets the reference to Amemiya et al. in mounting rejections of claims 9 and 12 thereon.

Claim 9 defines a "flat display device..., comprising ...a pair of substrates defining a gas discharge space in which a gas mixture...is sealed...and a material suppressing...near infrared rays emitted from said gas mixture." As here relevant, claim 12 includes similar recitations.

As is easily seen, Amemiya et al. discloses only an AC-PDP display with which an IR filter is employed for observing luminescence of phosphor light. Namely, the IR filter is used only for conducting an experiment - - and it is well known that many different filters may be used for observing luminescence of phosphor light in such experiments.

The particular experiment of Amemiya et al. relied upon relates to use of an "IR CUT" filter, in order to observe a luminescence of phosphor light. When the experiment is over, the IR filter is no longer necessary and thus is removed.

Accordingly, when the AC-PDP of Amemiya et al. is subsequently placed in use near a remote control, it will cause the remote control to malfunction, since the AC-PDP of Amemiya et al. does not comprise an IR filter.

As is apparent from the experimental results set forth in the Amemiya et al. publication, the "IR-cut optical filter" is employed only in developing the image of FIG. 2-1, indicating "that the luminous area (page 965, left column) expands from electrode's gap to far outer edge of both the cathode and anode electrodes."

Further reported experiments and results shown, e.g., in FIGS. 2-3, FIGS. 3 and 4, depict

conditions of xenon (Xe) infrared light emission relative to the anode and cathode and a “difference of the luminance distribution of Xe infrared light with different electrode’s length. (Page 965, right-hand column)

The preliminary nature of the results reported in the article is evident throughout - - e.g., the article suggesting, at best, that further investigation should be undertaken. See, for example, “3. Discussion” in the right column of page 965:

...[T]he remarkable difference between the infrared emission ratio and visible light emission ratio suggests that something make another contribution to VUV light emission.

(Emphasis added)

With regard to “the observed standing striations structure in the anode region,” the authors further point out:

...[T]he fact that this structure is observed only above the annoy electrode draws our attention very much.

Further investigations about the luminescence profile in ...[the]... anode region should be requested to improve the visible light emission efficiency of the co-planner structured AC-PDPs.

(Page 956, cols. 1 and 2; emphasis added)

Clearly, there is no teaching in the reference of the structure of the “flat display device...” as defined in pending claims 9 and 12, comprising as a component thereof “a material suppressing...near infrared rays...” Specifically, applicants traverse the Examiner’s contention as set forth in Item 3 of the Action, that Amemiya et al. discloses a component, of the flat panel display device of “a material (IR cut filter) inherently suppressing near infrared rays....” Indeed, Item 5 of the Action refutes the contention in Item 3, since therein the Examiner concedes:

...Amemiya et al. do not disclose the (IR cut filter) material applied on the front, rear substrate or inside the front substrate....”

THE PRESENT INVENTION

Contrary to the disclosure of Amemiya et al., and as taught in the present application, the inventor of the. present invention determined a new problem of a malfunction, of near infrared remote control, for domestic electric appliances in the home, (2) the problem being caused by infrared light emitted from an AC-PDP, as from a near infrared remote control and, further, (3) the problem being caused in a specified mixture ratio of Xenon in the gas mixture of an AC-PDP.

To solve this problem, the inventor conceived of an AC-PDP comprising a material suppressing (IR filter) of the present invention, by which it is possible to keep a remote control, for domestic electric appliances in the home, from malfunctioning because a material suppressing (IR filter) device suppresses the infrared light emitted from the AC-PDP.

Amemiya et al. does not recognize or disclose the above problem, much less the source of the problem and the conditions in which the problem is caused, e.g., the mixture ratio of the Xenon in the gas mixture.

In accordance with the foregoing, it is respectfully submitted that Amemiya et al., by the Examiner's own admission, lacks any teachings sufficient to support the anticipation rejection of claims 9 and 12 under 35 U.S.C. §102(b) and, further, that *prima facie* obviousness of the combination of Amemiya et al. and Wada et al., advanced in Item 5 of the Action in support of the obviousness rejection of claims 13 and 14, has not been shown as required under MPEP 2143-2143.03 and, accordingly, that all pending claims distinguish patentably distinguish over the references of record, taken singularly or in proper combination.

CONCLUSION

In accordance with the foregoing, it is submitted that all pending claims distinguish patentably over the references and rejections of record and, there being no further outstanding objections or rejections, that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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By: _____


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